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**Part I: Overview of Business**

- Lennox International.
- Founded in 1895 by Dave Lennox, the owner of a machine repair business for railroads in Marshalltown Iowa.
- 3 core businesses:
  - Residential Heating and Cooling
  - Commercial Heating and Cooling
  - Refrigeration

**Part II: Job Specifics**

- I have spent most of my time working with the Quality Analysis.
- The tasks I have performed have included pulling parts from the floor to measure and compare to the Engineers specifications along with doing box checks at the end of the assembly line.

**Part III: Introduce the Problem**

- Trying to catch freon leaks before the appliance makes it to the waiting area to reduce time between finishing and shipping.

**Part IV: Background**

- Use of different measuring tools.
- It is important to know what the nominal measurements are supposed to be, then they need to know what the variable is so that they can figure the LSL and USL.
- When is the earliest that a leak can be detected after the appliance is packaged?

**Part V: Business Solution**

- Lennox is working on different solutions to try to catch the problem sooner. They are implementing new processes for more detailed line work and box checks before the appliance gets to holding.
  - The problem has not yet been solved. It is an ongoing process that they will continually monitor.
- How would or did the business solve the problem?

**Part VI: Student Solutions**

- Students will be given the scenario and required to write up a possible solution on how to resolve or help resolve the situation.
- I want to have them write up different processes and thoughts of how they could catch the problem sooner. I hope to eventually share the finding with my host site. What solutions do you think students might come up with?